

REMARKS

The title has been amended. Claims 6, 7, 10, 11, and 14 have been amended. Claims 15 and 16 have been added.

Claims 1 - 5, 8 and 9, 12 and 13, subject of objections of the Examiner, are cancelled, without prejudice.

Claim 10 was rejected by the Examiner as being anticipated by Neilson. Claim 10 has been amended to require:

“forming a patterned insulated gate region at said first surface,

... and ...

using said patterned insulated gate region in forming a plurality of base region branches extending radially towards at least one base region branch of an adjacent cell to present juxtaposed base region ends,

subsequently merging together the base region branches of adjacent cells adjacent and between said juxtaposed base region ends to form said single and substantially uniformly doped base region”

In Neilson (see col. 3 L. 57 to col. 4 L. 10,) the process includes:

- c. Photomask with the body region pattern
- d. Implant and diffuse the body regions
- e. Photomask with the source contact region pattern and implant and diffuse the source contact regions
- f. Photomask with the source regions, allowing the source regions to be defined by the same mesh oxide that define the body regions
- g. Implant and diffuse the source regions
- h. Strip the mesh oxide and grow gate oxide
- i. Deposit and grow the gate.

Neilson does not teach the above cited limitations of claim 10. Specifically, additional photomasking steps are required and cannot ensure satisfactory self-alignment of the features of the source, base and insulated gate regions. In particular, Neilson has to strip the mesh oxide and

grow gate insulator after the base and source are already defined, which degrades the quality of the channels in the cells and of the gate insulator compared to the present invention.

Knoch does not supplement the teachings of Nielson in the above respects.

Accordingly, it is submitted that the distinctions cited above between the teachings of Nielson and claim 10 are not obvious and are allowable.

The other claims remaining in the application depend from claim 10 and are submitted to be allowable at least for that reason. In addition, it is submitted that these claims each specify specific inventive features.

Accordingly, it is submitted that all the claims are allowable and issue of a patent on the application is solicited.

Although Applicants may disagree with statements made by the Examiner in reference to the claims and the cited references, Applicants are not discussing all these statements in the current Office Action since reasons for the patentability of each pending claim are provided without addressing these statements. Therefore, Applicants reserve the right to address these statements at a later time if necessary.

No amendment made herein is related to the statutory requirements of patentability unless expressly stated herein. Further, no amendment herein is made for the purpose of narrowing the scope of any claim, unless Applicants have argued herein that such amendment was made to distinguish over a particular reference or combination of references.

SEND CORRESPONDENCE TO:

Freescal Semiconductor, Inc.
Law Department

Customer Number: 23125

Respectfully submitted,

By: 

David G. Dolézal
Attorney of Record
Reg. No.: 41,711
Telephone: 512-996-6839
Fax No.: (512) 996-6854